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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Guy Deneuvillers

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EXAMINER

FISHER, ELANA BETH

ART UNIT

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3733

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,935	<b>Applicant(s)</b> DENEUVILLERS ET AL.	
	<b>Examiner</b> ELANA B. FISHER	<b>Art Unit</b> 3733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 23 recites the limitation "posterior zone" and "anterior zone" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.
3. Claim 25 recites the limitation "anterior zone" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.
4. Claim 26 recites the limitation "anterior zone" in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 27 recites the limitation "anterior zone" in the first line of the claim and the limitation "posterior zone" in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 28 recites the limitation "posterior zone" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 29 recites the limitation "the top portion of the process at the bottom of the region..." in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim.
8. Claim 30 recites the limitation "the top face of the posterior portion" in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim.

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9. Claim 31 recites the limitation “the top face of the support and the process above the region fitted with an implant” in the second and third line of the claim. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 33-34 recites the limitation “the core of the posterior portion” in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 34 recites the limitation “the bottom and top faces” in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 35 recites the limitation “the posterior lateral zone” in the third line of the claim. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 42 recites the limitation “the top face of the posterior portion” and the limitation “the process” in the first and third lines of the claim. There is insufficient antecedent basis for these limitations in the claim.

14. Claim 40 recites the limitation “the implant” in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claims 22-35, 39, and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Samani (U.S. Patent 5,645,599).

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- a. Regarding claim 22, Samani discloses an intervertebral support (1) comprising an anterior portion (5a) suitable for being positioned in the space between the underlying and overlying laminae of two adjacent vertebrae (FIG 2), and a posterior portion (5b) comprising retaining means (6) for preventing the support from migrating towards the anterior portion of the spine by pressing against the laminae (FIG 3).
- b. Regarding claim 23, the retaining means (6) of the posterior zone (5b) are lateral shoulders (6) set back from the anterior zone (5a) and suitable for being received against the laminae of the vertebrae as close as possible to the articular facets (FIG 2).
- c. Regarding claim 24, the retaining means of the posterior portion (5b) are constituted by two transverse projections (6).
- d. Regarding claim 25, the anterior zone (5a) is provided with grooves (FIG 1).
- e. Regarding claim 26, the lateral shoulders (6) are of a small areas being of the type having symmetrically opposite projecting bulges set back from the anterior zone (5a) and suitable for releasing movement of the vertebral articular facets (FIG 1).
- f. Regarding claim 27, the anterior zone (5a) is provided with grooves (FIG 1) and the lateral shoulders (6) present height does not exceed the height of the posterior zone (5b) and is narrow in width.
- g. Regarding claim 28, the posterior zone (5b) serves to damp movements between two adjacent vertebrae.
- h. Regarding claim 29, the posterior portion (5b) comprises a bottom face bearing on a top portion of the process at the bottom of the region fitted with the implant (FIG 3).

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- i. Regarding claim 30, the posterior portion (5b) is prismatic in shaped (6) and of a height that corresponds to the spacing between the adjacent vertebrae, presenting at least one rounded corner (FIG 1), the top face of the posterior portion (5b) being triangular in shape (6).
- j. Regarding claim 31, the posterior portion (5b) presents a tapering shape (FIG 1) that permits a certain freedom of movement between the top face of the support and the process above the region fitted with an implant (FIG 3).
- k. Regarding claim 32, the posterior portion (5b) presents a top surface and a bottom surface (FIG 1) that are flared to the anterior end of the support (FIG 1), tapering progressively towards the posterior ends of the surfaces (FIG 1).
- l. Regarding claim 33, the core of the posterior portion (5b) is pierced by a through recess (FIG 1) enabling the flexibility of the implant to be increased.
- m. Regarding claim 34, the core of the posterior portion (5b) carries teeth spaced apart by furrows and opposed to each other in pairs on the bottom and top faces (Column 3, lines 55-57).
- n. Regarding claim 35, the vertical portions of the lateral shoulders in contact with the laminae (6) present respective concave zones extending and tapering towards the posterior lateral zone (5b).
- o. Regarding claim 39, the anterior portion (5a) is constituted entirely out of rigid biocompatible material (Colum 4, line 27).

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- p. Regarding claim 42, the top face of the posterior portion (5b) presents a shallow groove (7) extending lengthwise in its middle and suitable for coming into contact with the process above the region fitted with the implant (FIG 3).
17. Claims 22 and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Senegas (WIPO Publication WO01/28442).
- a. Regarding claim 22, Senegas discloses an intervertebral support (FIG 4) comprising an anterior portion (back of 2'') suitable for being positioned in the space between the underlying and overlying laminae of two adjacent vertebrae, and a posterior portion (front of 2'') comprising retaining means (6''a, 6''b) for preventing the support from migrating towards the anterior portion of the spine by pressing against the laminae.
- b. Regarding claim 40, the support (FIG 4) includes additional retention means (4'') constituted by ligaments grossing in the center of the implant, and holes extending vertically (38''a, 38''b) for passing the ligaments (4'').
- c. Regarding claim 41, the support includes additional retaining means (4'') constituted by ligaments passing through the full height of the support (FIG 4).

***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samani (U.S. Patent 5,645,699).

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- a. Regarding claim 36, Samani discloses a support according to claim 22 above, however fails to disclose the material of the posterior zone (5b). It would have been obvious to one having ordinary skill in the art at the time the invention was made to for the posterior zone (5b) to be made of silicone having hardness lying in the range 40 to 80 on the Shore A scale, allowing freedom of movement in the region fitted with the implant, and flexibility in order to relieve lordosis, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.
- b. Regarding claim 37, Samani discloses a support according to claim 22 above, however fails to disclose a material covering the posterior zone (5b). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a biocompatible knit fabric covering at least part of the posterior zone (5b), since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.
- c. Regarding claim 38, Samani discloses a support according to claim 22 above, however fail to disclose the material of the anterior zone (5a). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the anterior zone (5b) to be made of a rigid biocompatible material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.



***Response to Arguments***

20. Applicant's arguments with respect to claims 22-42 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELANA B. FISHER whose telephone number is (571)270-3643. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo Robert can be reached on (571)272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elana B Fisher/  
Examiner, Art Unit 3733

/Eduardo C. Robert/

Supervisory Patent Examiner, Art Unit 3733